III. Painting the Portrait of Culture Change

As we approach the mid-point of the second decade in the 21st century, enormous forces of change are influencing the workplace, inside and outside of government. The evolution of our nation's health care system, from one based on services provided to an information-based health ecosystem, is felt in every corner of our organization. Uses of information and communication technologies are essential to meet today's demands for speed, precision, accuracy, accountability and security. The sustainment and curation of institutional knowledge amidst a rapidly aging workforce are today's realities that will impact tomorrow's capabilities to fulfill our mission. The business sector of our economy is relying more heavily on open innovation methods to achieve productivity and competitiveness in the marketplace, and we must follow their lead. For government to optimize its use of resources and ensure that we deliver on our ambitious mission, we must find ways to abandon failed methods, challenge current practices of bureaucracy, and liberate not only our data but the knowledge, skills, and capabilities of HHS employees. Importantly, we need to define the characteristics of this change, define objective goals and metrics for assessing our progress, and establish expectations that all employees can comprehend.

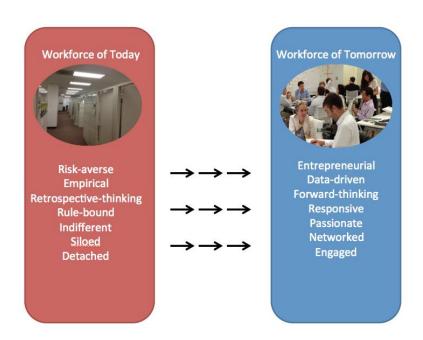
The word "innovation" has become overused and therefore lost its specificity. This is partially because the concept of innovation is somewhat abstract and difficult to explain or execute on. Therefore, we have chosen a new definition of "innovation" to ground and focus our activities one that encodes action and offers a tangible next step. Specifically:

Innovation is the direct result of the **freedom to experiment**.

Our innovation efforts focus on empowerment of employees. Innovative behavior is not something that can be mandated—an employee cannot be instructed to simply "be innovative" and expect to succeed. Rather, innovation is the by-product of experimentation—the establishment of a hypothesis, followed by rigorous testing, measuring and rapidly iterating.

Our approach to fueling innovation at the Department will not be through management edict but rather by engaging and encouraging managers and employees to unleash their creativity to accomplish their missions. In an organization like ours with well-established silos and entrenched hierarchical structures, there is no single step that can be taken or any single action that will create a sense of empowerment and foster creativity and experimentation across the entire organization—especially in a lasting manner. Rather, we believe that we must achieve these aims through developing core principles and establishing pilot projects and demonstrations, which will also show the validity of our approaches. In a few isolated areas, policies or directives may be possible, but in most cases we must lead by example, serving as a "bright light" by inspiring innovation through demonstrating what works, proving that intelligent failures are positive results and encouraging employees and managers alike through the power of positive persuasion.

What characteristics describe our workforce of the future? Descriptors that come to mind are entrepreneurial, data-driven, forward thinking, responsive, passionate, networked and engaged. We want the Department to be a place that smart minds gravitate toward, a place where employment is not seen as a haven for the risk-adverse but rather an environment that attracts agents of change, those who have the passion to persevere through tough problems and those who can keep the end goal in mind when wrestling through the inevitable set-backs that come with forging new ground. The Department should be thought of as the groundbreaking thought leader when it comes to new approaches to public health, health care, and the delivery of human services.



With all of this in mind, we have established a set of five guiding principles that are necessary for spurring innovation at HHS and building the foundation for a 21st century workforce:

1. Frictionless collaboration is central to enhancing peer support, building networks and enabling effective knowledge transfer

In an organization as large and heterogeneous as ours, it is understandable how daunting it is for employees to find peers and knowledge experts to consult with when determining how best to carry out a given task. The projects and assignments each employee engages in each day require a remarkable amount of interaction—interactions which would be massively enhanced if only employees could easily find peers to engage with.

In 2012 we instituted several department-wide electronic systems and negotiated terms of service agreements to enable networked communications among HHS employees. Moving beyond the linearity and constraints of current communication mechanisms such as email and the inefficiencies and frustrations it entails, we are implementing department-wide collaboration tools such as Yammer (known as HHSconnect) to allow

employees to simply and quickly broadcast messages, ask questions and crowdsource ideas. We are working with various parts of the Department to pilot task management tools, webcasting and other community platforms that enable better prioritization, increased connection with colleagues across the Department, and more productive work. We predict the use of collaboration tools will expand over time to build a stronger sense of community, greater satisfaction and performance, and enhance the knowledge base of HHS employees. The increased ability to collaborate across the federal government is highly aligned with the Administration's Open Government and Digital Strategy initiatives. It is also an important way in which younger generations, our new and prospective employees, are communicating in their private lives and the private sector, and will expect to communicate professionally in the public sector.

In addition to virtual collaboration, physical collaboration across administrative boundaries presents a significant challenge in the Department. In the scientific literature exploring the history of innovation and breakthrough developments, it is often noted that many of these new ideas result directly from a number of people with different backgrounds and experiences working together in close physical proximity. This is sometimes referred to as enabling "serendipitous collisions." Unfortunately, in the current physical spaces available to the Department, these collisions are infrequent at best. To address this deficiency, we are partnering with the Office of the National Coordinator for Health IT, the Assistant Secretary for Preparedness and Response, and the Assistant Secretary for Administration, to build HHSlabs, a Silicon Valley-style coworking space that will enable individuals and groups from across the Department to work together without barriers.

2. New methods for problem-solving are an imperative if we are to fully capitalize on employee talent

Bureaucracies thrive on predictability, but this predictability starves organizations' capability to adapt to changing demands and circumstances. Rules and processes that no longer have meaning and thwart the motivations for experimenting with new ideas often remain in place. The problems facing our program managers today are incredibly challenging and require new methods of problem solving, methods that will require us to look outside the organization, to experiment and to iterate. Moreover, in today's fiscal climate, our organization will not be successful if we remain dependent on consultants and advisors for each new program. Instead we need to build internal capacity to address the needs of our complex systems by identifying employees who have promising ideas and by giving them the freedom, time and resources to experiment.

We have recently established two new programs demonstrating the value of allowing small groups of HHS employees to work in new kinds of environments to solve important problems. The first program, HHS*entrepreneurs*, allows us to select high-priority challenges and bring a select number of external innovators into the Department to work with our employees in nimble teams that are given the explicit permission to

experiment. Thus far the results have been impressive, not only in terms of solving the initial challenges, but also beginning to change the culture of the host organizations. We believe that expanding this program more broadly across the Department will enhance the scalability of practices that will shorten timelines, enhance productivity and lead to successes that can be measured in outcomes and real assets.

The second program, HHS*ignite*, provides seed funding and an explicit promise of free time to HHS employees to allow them to experiment and test out new ideas. It was designed as a means to encourage and support new concepts and approaches to some of the most vexing challenges in our programs. The most interesting part of this program is the enthusiastic level of interest by program staff. In general, we have found that their interests are not solely based on the financial support but rather on the attempt to find collaborators and new insights in to how to approach their work. The HHS staff clearly desire to engage with others to help them in their journey, but often perceive resistance from supervisors for seeking input from outside their administrative units. Assuming our pilot is successful, we hope to eventually double the number of funded projects, all with the support and buy-in of the participating operating divisions. As part of our commitment we will support projects, collect data, connect expert problem-solvers with teams and showcase the results, in triumph or failure, in order to learn from these model experiments. Both of these programs are further discussed in Section III of this document.

Additionally, this past year, HHS formed an agreement with the West Health Institute to establish an entrepreneur-in-residence position in support of innovative new methods to create value from health data. This arrangement allows experts from outside government to spend a year working on teams within HHS on innovative technology applications to improve health care. The West Health Institute entrepreneur this year has worked on liberating medical data from electronic data systems and making it available to patients and consumers in association with the Blue Button program. We anticipate expanding this program in 2013 to additional external organizations, and formalizing the process so other entities within the Department can take advantage of this mechanism.

3. Entrepreneurship and experimentation should be supported and encouraged by management

It is our role to create the conditions under which problem-solving behavior is encouraged and enabled. As part of this culture change we must recognize that not every good idea will produce its intended result, and that failed attempts must be recognized for what they can teach us. It will be our role to make new kinds of problem-solving programs widely available across the Department and to reward managers for encouraging their employees to participate. We must start to share the lessons learned from these experimental approaches in the hopes that our stories can inspire others to follow suit, and that we can learn from successes as well as ideas that did not turn out as

planned. We are watching ways in which the private sector is promoting experimentation and one area of exploration is the ability to give high-performing employees a dedicated percentage of their time to experiment with new methods for achieving intended mission-relevant results.

Ideally there would also be some way for us to formally give credit to HHS employees for entrepreneurship and experimentation. Our HHS*innovates* program is an attempt at providing official recognition from the Office of the Secretary for entrepreneurial behavior. However, due to constraints relating to the Office Personnel Management's (OPM) federal-wide regulations governing the management of an employee's performance record, innovation awards from this program are not able to be formally recorded in an employee's personnel folder, other than the fact a cash award was made. Agencies are free to include their own notations in employee evaluations but currently the Secretary's awards do not translate into official documentation that can currently be recognized under OPM regulations.

In recognition of the fact that enabling the next-generation workforce requires bringing the right people into the right roles and, by all accounts, the hiring process in the federal government is fundamentally broken, we have been working with the Office of Human Resources within the Assistant Secretary for Administration to define a new process for bringing top notch talent into the government. This effort re-envisions the hiring manager as the center of the process with human resources staff acting as support. This goal of this strategy is to reduce the overall time to hire while increasing the quality of the candidates selected for each position.

4. Innovation can be fueled with open partnerships that leverage communities beyond the Federal government

Federal laboratories have long served as hot-zones of innovation in many technical areas. As the focus on information plays a larger role, it is expected that the programs of the Department will increasingly be knowledge engines for innovation in our broader economy. As the Health Data Initiative has demonstrated, unleashing government resources can bring many unexplored opportunities for open innovation in the private sector. At this year's Health Datapalooza IV we witnessed the development of hundreds of new tools and platforms that used health data to improve public health and how health care is delivered. The challenge competitions that the Department has engaged in over the past two years (through the HHScompetes program) are yet another promising example of how we can use HHS employees to help define key problems and promote the crowdsourcing of solutions. This year we have begun experimenting with new forms of open innovation, in order to more proactively engage the prospective users of our solutions. We have demonstrated the value of co-design with end users (e.g., through inviting target audiences to interact with us by providing comments, voting and even direct financial sponsorship of promising solutions) so that we can more effectively

understand the needs of our user community and design products that more effectively meet their needs. Our HHS*innovates* program has demonstrated success in exposing internal innovations to private sector interests who have taken the results and expanded on them for commercial benefit. We believe that there may be new opportunities for the government to leverage open innovation through new uses of the America COMPETES Act and uses of crowdsourcing platforms for featuring HHS projects to the public for sharing ideas and promoting early stage product and prototype development.

On the data front, we are seeking to accelerate the pace of innovation and system transformation through further development of the Health Data Initiative. We have sought to promote a community of data users, both inside and outside of the Department. To achieve this, we are now taking the next steps to recognize the full value of the data by transforming healthdata.gov from a "card catalog" model to a "wiki" model that allows internal and external users to create content interactively. We want to not only direct users to the data, but also provide them with the necessary context around the data, including information and examples of how we see data being used for value creation. We will also utilize code-a-thons, challenge competitions, and data enclaves as strategies to cultivate innovative solutions to key health care problems. Other key data initiatives will include defining the government's role in value creation and looking at reimbursement models and incentives, as well as removing regulatory roadblocks inhibiting the creation of new medical products.

5. Objective measure of results can provide the compass for better decision-making and iterative learning

It has often been said that change is difficult to achieve if you don't have ways to measure the results. In many cases, we have found that program staff are not trained to measure their results or perform their tasks in ways that can be quantitatively assessed. Additionally, line management is often not focused on using metrics to measure progress. One key area we hope to engage many parts of the Department in is the development of process and outcome measures that will be easily adapted to the modes of experimentation we promote in problem-solving. The second step is promoting the knowledge that the lack of success in experimentation does not equate to failure, unless nothing is learned from it. Therefore, we hope to engage all of our programs in exploring risk-taking in ways that can allow iterative assessments of progress and promote the sharing of data and experiences with others. Working with the evaluation components of the Department, we will develop quantitative assessment tools and promote transparency of results so that many can learn from a few.